

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Previously Presented) A method of inserting an implantable cardioverter-defibrillator within a patient, the method comprising the steps of:

providing a cardioverter-defibrillator canister having at least a portion of the cardioverter-defibrillator canister being non planar to maintain the cardioverter-defibrillator canister in a predetermined relationship with respect to a patient's heart, subcutaneously over a patient's ribcage;

making an incision into the patient; and

advancing the cardioverter-defibrillator canister through the incision and subcutaneously over the patient's ribcage; wherein the incision is made approximately at the level of the cardiac apex.

2. (Previously Presented) The method of claim 1, wherein the canister has a length of less than 30 centimeters.

3. (Original) The method of claim 2, wherein the cardioverter-defibrillator canister has a length of approximately 3 centimeters to approximately 30 centimeters.

4. (Original) The method of claim 2, wherein the cardioverter-defibrillator canister has a length of approximately 5 centimeters to approximately 20 centimeters.

5. (Original) The method of claim 2, wherein the cardioverter-defibrillator canister has a length of approximately 5 centimeters to approximately 12 centimeters.

6. (Original) The method of claim 1, wherein the cardioverter-defibrillator canister has a width of approximately 3 centimeters to approximately 10 centimeters.

7. (Original) The method of claim 1, wherein the cardioverter-defibrillator canister has a width of approximately 3 centimeters to approximately 6 centimeters.

8. (Original) The method of claim 1, wherein the cardioverter-defibrillator canister has a depth that is less than approximately 15 millimeters.

9. (Original) The method of claim 1, wherein the cardioverter-defibrillator canister further comprises a first end and a second end.

10. (Previously Presented) The method of claim 9, wherein a width of the cardioverter-defibrillator canister between the first end and the second end are substantially similar.

11. (Original) The method of claim 1, wherein a length of the cardioverter-defibrillator canister is greater than a width of the cardioverter-defibrillator canister.

12. (Previously Presented) The method of claim 1, wherein a length of the cardioverter-defibrillator canister is substantially similar to a width of the cardioverter-defibrillator canister

13. (Original) The method of claim 9, wherein the first end of the cardioverter-defibrillator canister is rounded.

14. (Original) The method of claim 13, wherein the second end of the cardioverter-defibrillator canister is substantially square.

15. (Original) The method of claim 13, wherein the second end of the cardioverter-defibrillator canister is rounded.

16. (Original) The method of claim 9, wherein the width of the cardioverter-defibrillator canister tapers inwardly between the second end of the cardioverter-defibrillator canister and the first end of the cardioverter-defibrillator canister.

17. (Original) The method of claim 9, wherein the depth of the cardioverter-defibrillator canister decreases from the second end of the cardioverter-defibrillator canister to the first end of the cardioverter-defibrillator canister.

18. (Original) The method of claim 1, wherein the cardioverter-defibrillator canister further comprises an electrode located on a portion of the cardioverter-defibrillator canister.

19. (Original) The method of claim 18, wherein the electrode can emit a shocking energy.

20. (Original) The method of claim 1, wherein at least a portion of the cardioverter-defibrillator canister comprises an electrically insulated material.

21. (Cancelled).

22. (Previously Presented) The method of claim 1 wherein the incision is made approximately in the left anterior axillary line.

23. (Original) The method of claim 1, further comprising the step of shaping a passageway within the patient for the cardioverter-defibrillator canister to navigate.

24. (Original) The method of claim 1, wherein the cardioverter-defibrillator canister is advanced proximate the patient's heart.

25. (Previously Presented) The method of claim 1, wherein the cardioverter-defibrillator canister is advanced medially along approximately a patient's left inframammary crease.

26. (Original) The method of claim 1, wherein the cardioverter-defibrillator canister is advanced toward a patient's sternum.

27. (Original) The method of claim 1, wherein the cardioverter-defibrillator canister is advanced approximately between a patient's third and a patient's twelfth rib.

28. (Original) The method of claim 1, wherein the cardioverter-defibrillator canister refrains from directly contacting the patient's heart.

29. (Original) The method of claim 1, wherein the cardioverter-defibrillator canister refrains from directly contacting a patient's intrathoracic vasculature.

30. (Previously Presented) The method of claim 1, further comprising the step of orienting a length of the cardioverter-defibrillator canister along a length of the ribs in the ribcage.

31. (Previously Presented) The method of claim 1, further comprising the step of orienting a length of the cardioverter-defibrillator canister perpendicularly to a length of the ribs in the ribcage.

32. (Currently Amended) A method of inserting an implantable cardioverter-defibrillator within a patient, the method comprising the steps of:

providing the implantable cardioverter-defibrillator comprising a housing and an electrode located on the housing, wherein the implantable cardioverter-defibrillator is configured to provide a shocking energy to a patient's heart by the electrode;

making an incision into the patient approximately in the left anterior axillary line; and
advancing the implantable cardioverter-defibrillator through the incision and subcutaneously in the area defined between approximately a patient's third rib and approximately a patient's twelfth rib.

33. (Original) The method of claim 32, wherein the cardioverter-defibrillator has a length of less than 30 centimeters.

34. (Original) The method of claim 32, wherein the cardioverter-defibrillator has a length of approximately 3 centimeters to approximately 30 centimeters.

35. (Original) The method of claim 32, wherein the cardioverter-defibrillator canister has a length of approximately 5 centimeters to approximately 20 centimeters.

36. (Original) The method of claim 32, wherein the cardioverter-defibrillator has a length of approximately 5 centimeters to approximately 12 centimeters.

37. (Original) The method of claim 32, wherein the cardioverter-defibrillator has a width of approximately 3 centimeters to approximately 10 centimeters.

38. (Original) The method of claim 32, wherein the cardioverter-defibrillator has a width of approximately 3 centimeters to approximately 6 centimeters.

39. (Original) The method of claim 32, wherein the cardioverter-defibrillator has a depth that is less than approximately 15 millimeters.

40. (Original) The method of claim 32, wherein the cardioverter-defibrillator further comprises a first end and a second end.

41. (Original) The method of claim 40, wherein the width of the cardioverter-defibrillator between the first end and the second end are substantially similar.

42. (Original) The method of claim 32, wherein a length of the cardioverter-defibrillator is greater than a width of the cardioverter-defibrillator.

43. (Original) The method of claim 32, wherein the length of the cardioverter-defibrillator is substantially similar to the width of the cardioverter-defibrillator.

44. (Original) The method of claim 40, wherein the first end of the cardioverter-defibrillator is rounded.

45. (Original) The method of claim 44, wherein the second end of the cardioverter-defibrillator is substantially square.

46. (Original) The method of claim 44, wherein the second end of the cardioverter-defibrillator is rounded.

47. (Original) The method of claim 40, wherein the width of the cardioverter-defibrillator tapers inwardly between the second end of the cardioverter-defibrillator and the first end of the cardioverter-defibrillator.

48. (Original) The method of claim 40, wherein the depth of the cardioverter-defibrillator decreases from the second end of the cardioverter-defibrillator to the first end of the cardioverter-defibrillator.

49. (Original) The method of claim 32, wherein at least a portion of the cardioverter-defibrillator is substantially non planar.

50. (Original) The method of claim 32, wherein the cardioverter-defibrillator further comprises an electric circuit located in a portion of the cardioverter-defibrillator.

51. (Original) The method of claim 50, wherein the electric circuit may provide multiphasic cardiac pacing.

52. (Original) The method of claim 32, wherein at least a portion of the cardioverter-defibrillator comprises an electrically insulated material.

53. (Currently Amended) ~~The method of claim 32,~~ A method of inserting an implantable cardioverter-defibrillator within a patient, the method comprising the steps of:

providing the implantable cardioverter-defibrillator comprising a housing and an electrode located on the housing, wherein the implantable cardioverter-defibrillator is configured to provide a shocking energy to a patient's heart by the electrode;

making an incision into the patient; and

advancing the implantable cardioverter-defibrillator through the incision and subcutaneously in the area defined between approximately a patient's third rib and approximately a patient's twelfth rib;

wherein the incision is made approximately at the level of the cardiac apex.

54. (Currently Amended) The method of claim [[32]] 53, wherein the incision is made approximately in the left anterior axillary line.

55. (Original) The method of claim 32, further comprising the step of shaping a passageway within the patient for the cardioverter-defibrillator to navigate.

56. (Original) The method of claim 32, wherein the cardioverter-defibrillator is advanced proximate the patient's heart.

57. (Currently Amended) ~~The method of claim 32,~~ A method of inserting an implantable cardioverter-defibrillator within a patient, the method comprising the steps of:

providing the implantable cardioverter-defibrillator comprising a housing and an electrode located on the housing, wherein the implantable cardioverter-defibrillator is configured to provide a shocking energy to a patient's heart by the electrode;

making an incision into the patient; and

advancing the implantable cardioverter-defibrillator through the incision and subcutaneously in the area defined between approximately a patient's third rib and approximately a patient's twelfth rib;

wherein the cardioverter-defibrillator is advanced medially toward approximately a patient's left ~~inframmary~~ inframammary crease.

58. (Original) The method of claim 32, wherein the cardioverter-defibrillator is advanced proximate a patient's sternum.

59. (Original) The method of claim 32, wherein the cardioverter-defibrillator refrains from directly contacting the patient's heart.

60. (Original) The method of claim 32, wherein the cardioverter-defibrillator refrains from directly contacting a patient's intrathoracic vasculature.

61. (Previously Presented) The method of claim 32, further comprising the step of orienting a length of the cardioverter-defibrillator along a length of the ribs in the ribcage.

62. (Previously Presented) The method of claim 32, further comprising the step of orienting a length of the cardioverter-defibrillator perpendicularly to a length of the ribs in the ribcage.

63. (Previously Presented) A method of inserting an implantable cardioverter-defibrillator within a patient, the method comprising the steps of:

providing a cardioverter-defibrillator comprising a housing, an electrical circuit located within the housing, and an electrode located on the housing, wherein the cardioverter-defibrillator is configured to maintain the electrode in a predetermined relationship subcutaneously over a patient's ribcage;

making a incision into the patient; and

advancing the cardioverter-defibrillator through the incision and subcutaneously over the patient's ribcage; wherein the cardioverter-defibrillator is advanced medially toward approximately a patient's left inframammary crease.

64. (Original) The method of claim 63, wherein the housing has a length of less than 30 centimeters.

65. (Original) The method of claim 64, wherein the housing has a length of approximately 3 centimeters to approximately 30 centimeters.

66. (Original) The method of claim 64, wherein the housing has a length of approximately 5 centimeters to approximately 20 centimeters.

67. (Original) The method of claim 64, wherein the housing has a length of approximately 5 centimeters to approximately 12 centimeters.

68. (Original) The method of claim 63, wherein the housing has a width of approximately 3 centimeters to approximately 10 centimeters.

69. (Original) The method of claim 63, wherein the housing has a width of approximately 3 centimeters to approximately 6 centimeters.

70. (Original) The method of claim 63, wherein the housing has a depth that is less than approximately 15 millimeters.

71. (Original) The method of claim 63, wherein the housing further comprises a first end and a second end.

72. (Original) The method of claim 71, wherein the width of the housing between the first end and the second end are substantially similar.

73. (Original) The method of claim 63, wherein a length of the housing is greater than a width of the housing.

74. (Original) The method of claim 63, wherein the length of the housing is substantially similar to the width of the housing.

75. (Original) The method of claim 71, wherein the first end of the housing is rounded.

76. (Original) The method of claim 75, wherein the second end of the housing is substantially square.

77. (Original) The method of claim 75, wherein the second end of the housing is rounded.

78. (Original) The method of claim 71, wherein the width of the housing tapers inwardly between the second end of the housing and the first end of the housing.

79. (Original) The method of claim 71, wherein the depth of the housing decreases from the second end of the housing to the first end of the housing.

80. (Original) The method of claim 63, wherein at least a portion of the housing is substantially non planar.

81. (Original) The method of claim 71, wherein the electrode is located on a portion of the first end of the housing.

82. (Original) The method of claim 81, further comprising a second electrode being electrically coupled to the electrical circuit within the housing.

83. (Original) The method of claim 82, wherein the second electrode is located upon a portion of the second end of the housing.

84. (Original) The method of claim 63, wherein at least a portion of the housing comprises an electrically insulated material.

85. (Previously Presented) The method of claim 63, wherein the incision is made approximately at the level of the cardiac apex.

86. (Previously Presented) A method of inserting an implantable cardioverter-defibrillator within a patient, the method comprising the steps of:

providing a cardioverter-defibrillator comprising a housing, an electrical circuit located within the housing, and an electrode located on the housing, wherein the cardioverter-defibrillator is configured to maintain the electrode in a predetermined relationship subcutaneously over a patient's ribcage;

making an incision into the patient; and

advancing the cardioverter-defibrillator through the incision and subcutaneously over the patient's ribcage, wherein the incision is made approximately in the left anterior axillary line.

87. (Original) The method of claim 63, further comprising the step of shaping a passageway within the patient for the cardioverter-defibrillator to navigate.

88. (Original) The method of claim 63, wherein the cardioverter-defibrillator is advanced proximate the patient's heart.

89. (Cancelled).

90. (Original) The method of claim 63, wherein the cardioverter-defibrillator is advanced proximate a patient's sternum.

91. (Original) The method of claim 63, wherein the cardioverter-defibrillator is advanced approximately between a patient's third and a patient's twelfth rib.

92. (Original) The method of claim 63, wherein the cardioverter-defibrillator refrains from directly contacting the patient's heart.

93. (Original) The method of claim 63, wherein the cardioverter-defibrillator refrains from directly contacting a patient's intrathoracic vasculature.

94. (Previously Presented) The method of claim 63, further comprising the step of orienting a length of the cardioverter-defibrillator along a length of the ribs in the ribcage.

95. (Previously Presented) The method of claim 63, further comprising the step of orienting a length of the cardioverter-defibrillator perpendicularly to a length of the ribs in the ribcage.

96. (Cancelled)

97. (Previously Presented) The method of claim 86 wherein said housing has an elongated shape with two opposed ends, and wherein said electrode is disposed adjacent to one end.

98. (Previously presented) The method of claim 97 wherein said electrode is disposed at one end.

99. (Previously presented) The method of claim 98 wherein said electrode is generally rectangular.

100. (Previously presented) The method of claim 99 wherein said electrode has rounded corners.

101. (Previously Presented) The method of claim 99 wherein said electrode is disposed transversally to a longitudinal axis of the housing.

102. (Previously presented) The method of claim 101 wherein said housing has a width and said electrode is disposed substantially along said width.

103. (Previously presented) The method of claim 98 wherein said electrode is triangular.

104. (Previously presented) The method of claim 103 wherein said electrode has rounded corners.

105. (Previously presented) The method of claim 103 wherein said housing has at least one corner and said electrode is disposed at said corner.

106. (Previously presented) The method of claim 105 wherein said electrode has a right angle disposed at the corner of the housing.

107. (Previously presented) The method of claim 97 wherein said electrode has a generally square shape.

108. (Previously presented) The method of claim 107 wherein said electrode has rounded corners.

109. (Previously presented) The method of claim 107 wherein said electrode is spaced away from the longitudinal sides of the housing.

110. (Previously Presented) The method of claim 1, wherein the incision is made approximately in the left anterior axillary line, and the cardioverter-defibrillator is advanced medially toward approximately a patient's left inframammary crease between the patient's third and the patient's twelfth rib.